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Clean amended claims from Preliminary Amendment A dated 22 March 2001

Claim 1

A thermo and photo stable composition comprising a hydrogel generated from a xanthane and chitosane complex, said hydrogel comprising at least one thermo or photo sensitive substance selected from the group consisting of: vitamins, amino acids, nucleic acids and tri-peptides, said hydrogel being adapted to release said thermo or photo sensitive substances over several hours in a human or animal subject.

Claim 2

The composition as defined in claim 1, wherein said thermo or photo sensitive substances are vitamins in a proportion of 5 to 25% of the total weight of said composition.

Claim 3

The composition as defined in claim 2, wherein said vitamins are selected from the group consisting of: A, B, C, D, E and K.

Claim 4

The composition as defined in claim 3, wherein said vitamin is vitamin A.

Claim 5

The composition as defined in claim 3, wherein said vitamin is vitamin C.

Claim 6

The composition as defined in claim 1, wherein said thermo and photo sensitive substances are liposoluble.

Claim 7

The composition as defined in claim 1, wherein the thermo and photo sensitive substances are hydrosoluble.

Claim 8

A process for the preparation of the composition as defined in claim 6, comprising the following steps:

- (a) dissolving the liposoluble substances in ethanol;
- (b) adding this solution while stirring to a xanthane solution;
- (c) pulverizing the solution from step (b) into an aqueous chitosane solution;
- (d) recovering the so-formed hydrogel.

All the steps being carried out in the absence of oxygen and light.

Claim 9

A process for the preparation of the composition as defined in claim 7, comprising the following steps:

- (a) pulverizing a xanthane solution into a chitosane solution;
- (b) recovering the so-formed hydrogel, the recovery being characterized by a lyophilization of the hydrogel;
- (c) introducing the lyophilized hydrogel into an aqueous solution comprising hydrosoluble substances;
- (d) incorporating hydrosoluble substances into the hydrogel, by diffusion of hydrosoluble substances during the swelling of the hydrogel, said hydrogel having a degree of swelling (a) of 2000% or more.

Claim 10

The preparation process as defined in claim 9 wherein, the stabilization of said hydrosoluble substances is favored by the addition of amino acids into the aqueous solution during step (c).

Claim 11

The process as defined in claim 10 wherein, said amino acids are selected from the group consisting of: L-cysteine, L-cystine, L-methionine, or mixtures thereof.

Claim 12

The preparation process as defined in claim 9 wherein, the stabilization of the hydrosoluble substances is favored by the addition of oligopeptides during step (c).

Claim 13

The use of the composition of any one of claims 1 to 7 in the manufacture of a dermatological product.

Claim 14

The use as defined in claim 13 wherein, said dermatological product is a cream.

Claim 15

The use as defined in claim 14 wherein, said thermo and photo sensitive substance is vitamin A.

Claim 16

The use of the composition of any one of claims 1 to 7 in the manufacture of a dietary supplement.

Claim 17

A process for the preparation of the composition as defined in claim 6, comprising the following steps:

- (a) dissolving the liposoluble substances in ethanol;
- (b) providing a xanthane solution;
- (c) pulverizing the solution from step (b) into an aqueous chitosane solution;
- (d) recovering the so-formed hydrogel;
- (e) incorporating the solution of step (a) by diffusion into the hydrogel of step (d).

All the steps being carried out in the absence of oxygen and light.